

AMENDMENTS TO THE SPECIFICATION:

Page 3, replace the paragraph, beginning on line 5, with the following amended paragraph:

--Japanese Unexamined Patent Publication No. 11-289345 has suggested a router for determining a route through which data is transmitted when networks are connected to each other. The router is comprised of a routing table, a ~~each~~ cache table, and a ~~each~~ cache management table. The routing table stores a network address as an IP address indicative of an address of a network to which data is to be transmitted, a next hop address as an IP address of a router to which data is to be transmitted, and a transmission interface number. The ~~each~~ cache table stores data about a link layer (MAC header) as an IP address of an address of a host, and a transmission interface number. A routing entry number is assigned to each entry in the routing table, and a ~~each~~ cache entry number is assigned to each entry in the ~~each~~ cache table. The ~~each~~ cache management table stores data indicative of a relation between the routing entry number and the ~~each~~ cache entry number.--

Page 18, replace the paragraph, beginning on line 5, with the following amended paragraph:

--On receipt of the ATM ARP packet, the fifth unit 505 transmits an ARP packet associated with the IP next hop 41x, to the Ethernet 300, in step [[110]] 110'.--

Page 19, replace the paragraph, beginning on line 9, with the following amended paragraph:

--With reference to Fig. 15, the third unit 503 receives an IP packet 32y including an IP next hop 41y, in step [[201]] 201'.--

Page 19, replace the paragraph, beginning on line 28, with the following amended paragraph:

--Then, the fifth unit 505 waits for a responsive ARP packet, in step [[210]] 210'.--

Page 19, replace the paragraph, beginning on line 29, bridging pages 19 and 20, with the following amended paragraph:

--When the fifth unit 505 receives a responsive ARP packet, the fifth unit 505 extracts the MAC address 43y out of the responsive ARP packet, in step [[211]] 211'.--

Page 20, replace the paragraph, beginning on line 2, with the following amended paragraph:

--Then, the fifth unit 505 stores a relation between the connection data 42y and the MAC address 43y into the table 603, in step [[212]] 212'.--